

AMENDMENT TO THE SPECIFICATION

Please amend the sequence listing by replace the sequence listing with the substitute sequence listing filed herewith.

Please replace the paragraph beginning on page 5, line 4 with the following rewritten paragraph:

- (ii) A peptide referred to herein as GIN 16 (SEQ ID No. 2 48), which is a slightly modified form of a tandem repeat peptide of the LDLR receptor binding region B of apolipoprotein B, and constructed by the inventor. GIN 16 consists of a human apolipoprotein B ₍₃₃₅₉₋₃₃₆₇₎ repeat having amino acid sequence LRTRKRGRKLRTKRGRK, in which residues 3359 and 3360 are reversed, and the leucine residue at position 3366 is replaced with an arginine;

Please amend Table 1, on page 8 of the specification, as follows:

1	2	3	4	5	6	7	8	9		
R	L	T	R	K	R	G	L	K	apoB 3359-3367	<u>SEQ ID No.1</u>
L	R	T	R	K	R	G	R	K	GIN 16	<u>Residues 1 to 9 of</u> <u>SEQ ID No.48</u>
W	R	W	R	K	R	W	R	K	GIN 33	<u>Residues 1 to 9 of</u> <u>SEQ ID No.7</u>
	R	T	R	K	R	G	R	K	GIN 35	<u>Residues 1 to 8 of</u> <u>SEQ ID No.3</u>
	R	T	R	K	R	G	R	K	GIN 36	<u>Residues 1 to 8 of</u> <u>SEQ ID No.4</u>
L	R	K	R	K	R	L			GIN 37	<u>Residues 1 to 7 of</u> <u>SEQ ID No.5</u>
L	R	K	R	K	R	R	L	L	GIN 38	<u>Residues 1 to 9 of</u> <u>SEQ ID No.6</u>
L	R	K	L	R	K	R	L	L	GIN 1p	<u>SEQ ID No.24</u>

Please replace the last paragraph on page 12 spanning to page 13 with the following rewritten paragraph:

Preferred peptides according to the first aspect of the invention comprise the amino acid sequence:

- (a) LRTRKRGRKLTRKRGRK (SEQ ID No.2 48). This peptide is designated GIN 16 when referred to herein;
- (b) RTRKRGRKRTRKRGRK (SEQ ID No.3). This peptide is designated GIN 35 when referred to herein;
- (c) RTRKRGRRTTRKRGR (SEQ ID No.4). This peptide is designated GIN 36 when referred to herein;
- (d) LRKRKRLLRKRKRL (SEQ ID No.5). This peptide is designated GIN 37 when referred to herein; and
- (e) LRKRKRLRKLKRKRLRK (SEQ ID No.6). This peptide is designated GIN 38 when referred to herein;
- (f) WRWRKRWRKWRWRKRWRK (SEQ ID No.7). This peptide is designated GIN 33 when referred to herein.
- (g) RRWRKRWRKWRWRKRWRK (SEQ ID No.34). This peptide is designated MU 28 when referred to herein.
- (h) KRWRKRWRKWRWRKRWRK (SEQ ID No.35). This peptide is designated MU 29 when referred to herein.
- (i) LRWRKRWRKWRWRKRWRK (SEQ ID No.36). This peptide is designated MU 30 when referred to herein.
- (j) HRWRKRWRKWRWRKRWRK (SEQ ID No.37). This peptide is designated MU 31 when referred to herein.
- (k) RWRKRWRKWRWRKRWRK (SEQ ID No.38). This peptide is designated MU 32 when referred to herein.
- (l) RRWRKRWRKRRWRKRWRK (SEQ ID No.39). This peptide is designated MU 33 when referred to herein.
- (m) KRWRKRWRKKRWRKRWRK (SEQ ID No.40). This peptide is designated MU 34 when referred to herein.

- (n) LRWRKRWRKLRWRKRWRK (SEQ ID No.41). This peptide is designated MU 35 when referred to herein.
- (o) HRWRKRWRKHRWRKRWRK (SEQ ID No.42). This peptide is designated MU 36 when referred to herein.
- (p) RWRKRWRKRWRKRWRK (SEQ ID No.43). This peptide is designated MU 37 when referred to herein.
- (q) RWRKRGRKRWRKRGRK (SEQ ID No.44). This peptide is designated MU 69 when referred to herein.
- (r) RTRKRWRKRTRKRGRK (SEQ ID No.45). This peptide is designated MU 70 when referred to herein.
- (s) RWRKRWRKRWRKRWRK (SEQ ID No.46). This peptide is designated MU 71 when referred to herein.
- (t) RWRKRWRWRKRWRWRKRW (SEQ ID No.47). This peptide is designated MU 84 when referred to herein.

Please replace the last paragraph on page 32 with the following rewritten paragraph:

Figure 4 illustrates data obtained for five peptides identified as GIN 16 (SEQ ID No.2 48), GIN 17 (SEQ ID No.15), GIN 27 (SEQ ID No.16), GIN 28 (SEQ ID No.17), and GIN 30 (SEQ ID No.18). **Figure 4** clearly shows that surprisingly only GIN 16 according to the first aspect showed antiviral activity, whereas GIN 17, GIN 27, GIN 28 and GIN 30 did not.

Please amend Table 4, on page 32 of the specification, as follows:

Peptide	Sequence	Source of peptide	IC50 (µM)
GIN 16	LRTRKRGRKLRTRKRGRK (SEQ ID No.2 48)	Human apolipoprotein B (3359-3367) repeat in which residues 3359 and 3360 reversed, and leucine residue at position 3366 replaced with an arginine.	22
Sequences where activity low:			
GIN 22	DWLKAFYDKVAEKLKEAF (SEQ ID No.20)	Amphipathic alpha helical peptide with antiviral properties (derived from apolipoprotein A1 by Ananatharamiah supra and tested against HIV by Srinivas supra (also known as peptide 18A)	36
GIN 29	HMLDVMQDHFSRASSIIDEL (SEQ ID No.21)	Amphipathic alpha helical region of human apolipoprotein J (apoJ 171-190)	38.5
GIN 13	RDADDLQKR RDADDLQKR (SEQ ID No.22)	Tandem repeat peptide derived from one section of primary human apoE heparin binding region (apoE (150-158)repeat)	>40
GIN 14	GERLRARMEGERLRARME (SEQ ID No.19)	Tandem repeat derived from second human apoE heparin binding region (211-219)repeat	>40
GIN 15	RLRARMEEMRLRARMEEM (SEQ ID No.23)	Tandem repeat derived from second human apoE heparin binding region (213-221)repeat	>40
Sequences where activity not detectible			
apoE 141-149	LRKLRKRL (SEQ ID No.24)	Human apoE LDLR/ heparin binding region.	NA
GIN 17	RALVDTLKFVTQAEQAK (SEQ ID No.15)	Human apoB heparin binding region.	NA
GIN 18	PYLDDFQKKWQEEMELYRQKVE (SEQ ID No.25)	Human apoA1 helical domain 4	NA
GIN 19	PLGEEMRDRARAHVDA LRTHLA (SEQ ID No.26)	Human apoA1 helical domain 6	NA
GIN 20	PYSDELRLRLAARLEALKENG (SEQ ID No.27)	Human apoA1 helical domain 7	NA
GIN 21	ARLA EYHAKATEHLSTLSEKAK (SEQ ID No.28)	Human apoA1 helical domain 8	NA
GIN 23	PVLDEFREKLNEELEALKQKMK (SEQ ID No.29)	Consensus domain from human apoA1 (Ananatharamiah supra)	NA
GIN 24	VTDYGKDLMEKVKSPQLQ (SEQ ID No.30)	Human apolipoprotein AII amphipathic alpha helical region (residues 18-35)	NA
GIN 25	VTDYGKDLMEKVKWLNS (SEQ ID No.31)	Human apolipoprotein AII amphipathic alpha helical region (residues 18-35) + modification by Bucko <i>et al.</i> , Int J Pept Protein Res. 1996; 48:21-30	NA
GIN 26	NFHAMFQPFLEMIHEAQQ (SEQ ID No.32)	Human apolipoprotein J amphipathic helix 3 (Bailey <i>et al. supra</i>)	NA
GIN 27	CKNKEKKCKNKEKKC (SEQ ID No.16)	Human apolipoprotein H heparin binding region (tandem repeat) ApoH(281-288)repeat	NA
GIN 28	LRKEKKRLRLRKEKKRL (SEQ ID No.17)	Modification of GIN 27	NA
GIN 30	LQVAERLRLRYNELLKSYQ (SEQ ID No.18)	Human apolipoprotein J amphipathic helix 4 (Bailey <i>et al.</i> 2001)	NA
GIN 31	KFMETVAEKALQEYRK (SEQ ID No.33)	Human apolipoprotein J amphipathic helix 5 (Bailey <i>et al.</i> 2001)	NA